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10/617,229	07/11/2003	Young-Chan Kim	1293.1854	2343

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EXAMINER	
RAHMJOO, MANUCHER	
ART UNIT	**PAPER NUMBER**
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/617,229	KIM, YOUNG-CHAN	
	Examiner	Art Unit	
	Mike Rahmjoo	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1- 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As per claim 11 applicant recites "a signal inputting unit receiving an R,G,B video signals from a host computer". Paragraph [0021] recites "referring to FIG. 1, a signal inputting unit 110 receives R,G,B signals and a vertical/horizontal signal from a host(not shown)" and [0028] recites only a host absent any description what this "host" is. Therefore, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1- 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1- 15 line 8 recites "...detecting a minimum pixel level value...". It is unclear what applicant is referring to as "pixel level". Some of the attributes of pixels are for example intensity, Gamma, etc. Is it the pixel attributes and their levels or is it something else.

Claims 2-3 are indefinite because they depend on indefinite antecedent claim.

Claims 4- 15 have similar rejections.

Examiner has been through the entire specification. There is no indication of what said "level" stands for. Said subject matter was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected.

As per the interview conducted 08/17/2007, applicant provided two references (i.e., US Patents 7167602 and 6560372) teaching "pixel value". Said citations are provided with support in their respective specifications and they are not indefinite. This is not applicable to the current application for patent and "pixel value" may not be equated with "pixel level".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1- 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (US Patent 5,644,325), hereinafter, King in view of Yamakawa et al (US Patent 5,809,366), hereinafter, Yamakawa.

As per claims 1, 4- 5, 7, 11- 12, 14 and 16 and as to the broadest reasonable interpretation by examiner, King teaches receiving RGB signals from a host (col. 16 line 55 corresponding to host) see for example figures 10- 11;

selecting one of an R, a G, or a B component of the RGB signal (see for example col. 3 lines 23- 27 for the selection of color blue and claims 2 and 3 wherein level select circuit controls the level of each R or G or B independently to control a color mixture) including the video signal as a selected one R,G, or B component see for example column 5 lines 38- 40 and setting a region (color key range) of the selected one R,G, or B signal as a checked region which is checked see for example column 7 line 25.

However King does not teach detecting a minimum pixel level value in the checked region; comparing the minimum pixel level value for the selected one R,G, or B component with a predetermined threshold value to determine whether an abnormal

one R,G, or B component is present, the abnormal R,G, or B component being a component abnormally input due to malfunction of the host; displaying on a screen a message indicator indicating whether the selected one R,G, or B component includes a video signal abnormally input due to the malfunction of the host; and signal input unit receiving RGB signals, a horizontal and vertical synchronization signal; and a storage unit storing the minimum pixel level value detected in the particular region of the selected one R,G, or B component.

Yamakawa teaches detecting a minimum pixel level value (determining the exact colors defining the point corresponding detecting minimum pixel level value to the colors of these points as said colors deviate the expected result by more than an allowable range wherein said deviation may assume any values in the minimum range and or maximum range see col. 14 lines 27- 30) in the checked region see for example column 14 lines 27- 31 for points deviated by more than an allowable range corresponding to the detecting a minimum pixel level;

comparing the minimum pixel level value for the selected one R,G, or B component with a predetermined threshold value (previous RGB data or allowable range) to determine whether an abnormal one R,G, or B component is present, the abnormal R,G, or B component being a component abnormally input due to malfunction of the host see for example column 14 lines 35- 38 wherein RGB data is compared with previous RGB data and correction is based on the results of comparison;

displaying on a screen a message indicator (corresponding to displaying a warning) indicating whether the selected one R,G, or B component includes a video signal abnormally input due to the malfunction of the host see for example column 14 lines 27- 35 through displaying a warning (a flag generated by the color calibration system) due to deviation by more than an allowable range OR improper reading of data;

signal input unit receiving R,G,B signals, a horizontal and vertical synchronization signal see for example figures 3- 5 for the color calibration system corresponding to the input unit for receiving R,G,B signals;

a storage unit storing the minimum pixel level value detected in the selected one R,G, or B component see for example the color calibration system of figures 4- 5 corresponding to the storage unit.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Yamakawa into King to perform minimum pixel level detection and comparison with a predetermined threshold value and thereafter displaying of a screen message as to provide a color balance selection method which allows a user to select the color balance relative to the calibrated standard of an image processing device and therefore reproduce colors contained in a specific image chosen by a user and thereby offer an efficient and user friendly device see for example column 2 lines 7-23.

As per claims 2 and 9 Yamakawa teaches setting a flag (warning) which indicates whether the selected one R,G, or B component is abnormal when the

minimum pixel level value is smaller (deviation by more than an allowable range) than a predetermined threshold value see for example column 14 line 32, and resetting (execute scanning again or repeat the process) the flag when the minimum pixel level value is larger (deviation by more than an allowable range) than the predetermined threshold value see for example column 14 lines 32- 33.

As per claim 3 and 10 Yamakawa teaches checking whether a flag indicating whether the selected one R,G, or B component is abnormal is set see for example figure 17 for the loop in the flow chart regarding the display warning block 494; checking if a video signal checking function is enabled when the flag is set see for example figure 17 (block 490) for the flow chart regarding color determination (checking) of the colors of the printed frames; and inherently teaches setting how long the message will be displayed and how long a predetermined warning message is displayed, when enabling of the video signal checking function is confirmed see for example column 14 lines 41-46 through the clock of the color calibration system which reduces the time (time setting for displaying a message) needed to perform the color balance adjustment along with reducing a load imposed on the processing system.

As per claims 6 and 15 and as to the broadest reasonable interpretation by examiner Yamakawa teaches the controller generates an on-screen-display (OSD) signal (displaying a warning) that enables and disables (the flow chart of figure 17) an R,G,B signal checking function.

As per claim 8 and in view of the rejection of the independent claims Yamakawa teaches extracting a minimum pixel level value when the pixel level value in the

selected one R,G, or B component is smaller than the predetermined value see for example figure 21 and column 14 lines 27- 30 for points 530- 533 when there is deviation more than a allowable range.

As per claim 13 and in view of the rejection of the independent claims Yamakawa teaches a comparator (color calibration system) comparing the minimum pixel level value in the selected one R,G, or B component with a minimum pixel level value detected in a previous signal (see for example column 14 line 36 fro comparing R,G,B data with previous R,G,B data), and extracts a minimum pixel level value see for example column 14 lines 30- 31 for improper reading or inputting due to deviation by more than an allowable range.

Response to Arguments

Applicant's arguments filed 08/09/2007 have been fully considered but they are not persuasive.

As per applicant's remarks on page 8, applicant argues "the burden is on the Office to articulate a prima facie case as to why one skilled in the art would not understand what is claimed. The Office Action appears to be looking to Applicant to limit the application to a particular attribute out of all of the attributes that may be encompassed by the term pixel value. However, "breadth of a claim is not to be equated with indefiniteness" MPEP § 2173.04 citing in re Miller, 441 F.2d 689, 169 USPQ 597 (CCPA 1971).".

Examiner respectfully disagrees and points out that examiner fails to see any attributes as listed in the specification. Examiner also points out to above explicit 112, 2nd paragraph rejection for further clarity.

As per applicant's remarks on page 9, applicant recites "Yamakawa further states at col. 14, lines 29-33:When the colors of these points deviate the expected result by more than an allowable range, it can be determined that the image data was not properly red [sic] or input and a warning for urging the user to execute the scanning again or repeat the process can be displayed. Yamakawa fails to suggest or disclose, either in the above-recited text or elsewhere, "an abnormal R,G, or B component," let alone "the abnormal R,G, or B component being a component abnormally input due to malfunction of the host." Although Yamakawa mentions RGB data at col. 14, lines 35-36, the RGB data in Yamakawa is never linked to the colors of the points described above, or described as including the points. Thus, Yamakawa describes improperly read or input image data but fails to suggest or disclose "determine[ing] whether an abnormal R,G, or B component is present." and "When the colors described in Yamakawa deviate the expected result, the user is simply warned to "execute the scanning again." Yamakawa fails to link the deviation to "the selected one R,G, or B component," nor does Yamakawa provide any indication of any "malfunction of the host."

Examiner respectfully disagrees.

Examiner clarifies as follows:

1) No teachings of "a region" is found throughout the specification which concerns the minimum pixel level. The specification is deplete with enablement issues (i.e., "pixel level", "checked region", "host", "a host computer", ...); therefore no clear and precise understanding of the various subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, is made.

2) Merriam Webster Online dictionary defines abnormal as "departing from accepted standard of what is normal; see Deviant". Yamakawa recites "When the colors of these points deviate the expected result by more than an allowable range, it can be determined that the image data was not properly red or input and a warning for urging the user to execute the scanning again or repeat the process can be displayed" see col. 14 lines 25- 35. As obviated said underlined terminology is in accordance with the dictionary meaning as provided and furthermore the cited portion from Yamakawa clearly justifies the comparison made therein through analysis and determination of colors. No such determinations of "deviation" would be feasible absent a comparison to be made, which is exactly what Yamakawa does. The allowable range taught by Yamakawa also has the inherent feature of minimum and maximum and the whole range in between said two limits. When any comparison within a range is made, said limits and the whole range in between is covered.

3) Yamakawa teaches issuing of a warning, which corresponds to applicant's claimed message, in the cited portion above which applicant argues on the same page.

In response to applicant's remarks on page 10 wherein applicant argues "the Office Action cites In re Oetiker 977 F.2d 1443 (Fed. Cir. 1992) at page 9, and asserts that a prior art reference "must either be in the field of applicant's endeavour or, if not, then [must] be reasonably pertinent to the particular problem with which the applicant was concerned." The Office Action then submits that "Yamakawa teaches color adjusting or calibrating by determining the exact colors." Id. Therefore, other than the conclusory statement that the combination is obvious because it offers "an efficient and user friendly device," the Office Action fails to provide any evidence as to why the color calibrating techniques of Yamakawa are reasonably pertinent to the particular signal processing problems of Kinq, or whether these claims recite a predictable use of established functions."

Examiner points out to detecting a minimum pixel level value (determining the exact colors defining the point corresponding detecting minimum pixel level value to the colors of these points as said colors deviate the expected result by more than an allowable range wherein said deviation may assume any values in the minimum range and or maximum range, it can be determined that the image data was not properly red or input and a warning for urging the user to execute the scanning again or repeat the process can be displayed", see col. 14 lines 27- 30. The underlined portions along with the response to applicant's arguments provided above is ample relativity to the same field of endeavor and is pertinent to the particular problem with which applicant is concerned. The motivation made of the record is "reproduce colors contained in a

specific image chosen by a user" and "offer an efficient and user friendly device" see col. 2 lines 7- 23.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that Yamakawa et al is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Yamakawa et al teaches color adjusting or calibrating by determining the exact colors. And if any deviations are noticed a warning is displayed.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, " to reproduce colors contained in a specific image chosen by a user" see col. 2 lines 7- 23.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is 571-272-7789. The examiner can normally be reached on 8 AM- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Rahmjoo

Matthew C. Bella

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August 18, 2007